

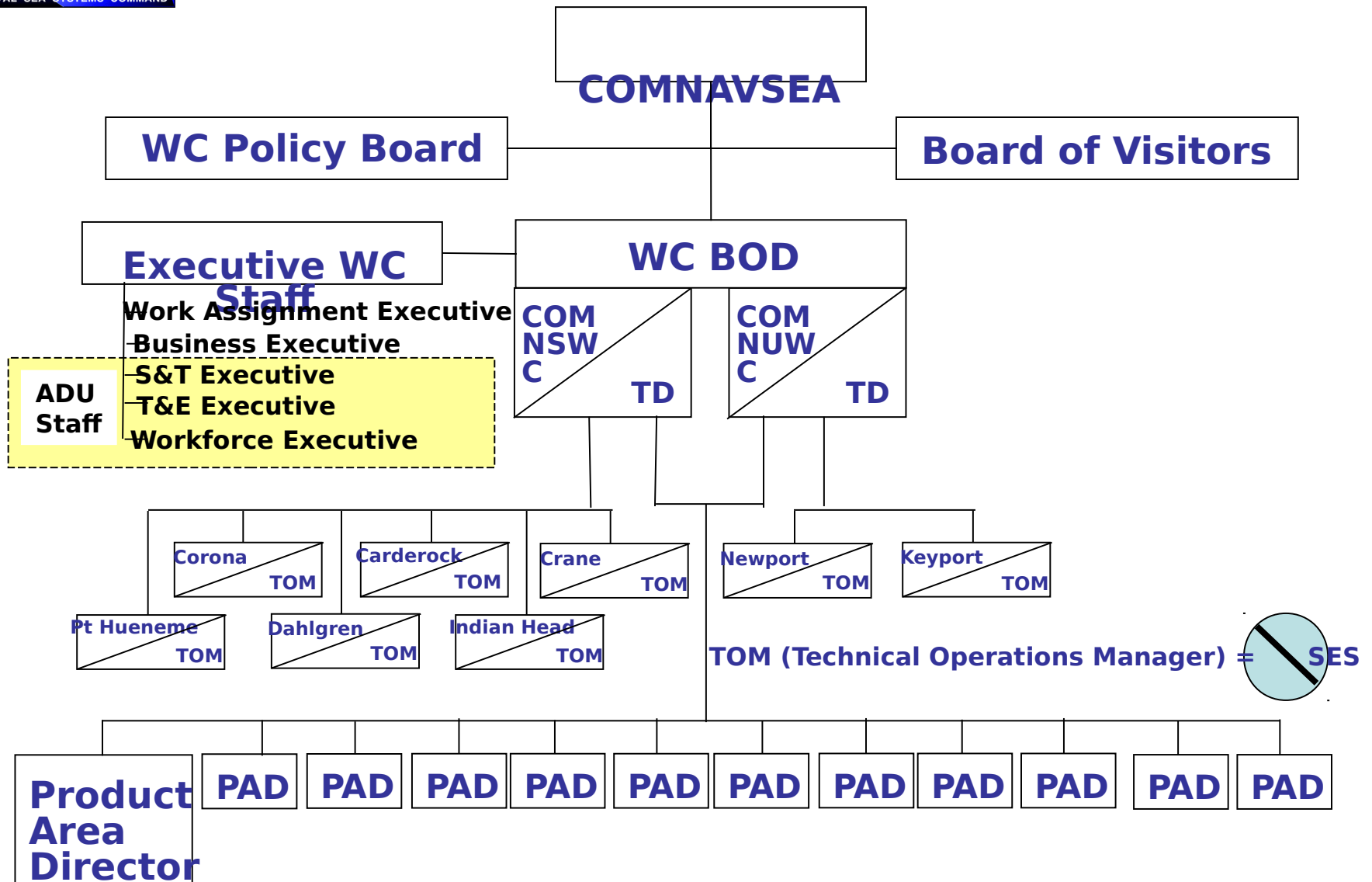
Littoral Warfare Product Area Director



Briefing to the NDIA

20 Oct 2003
Dr. David P. Skinner

WARFARE CENTERS' COMPONENTS



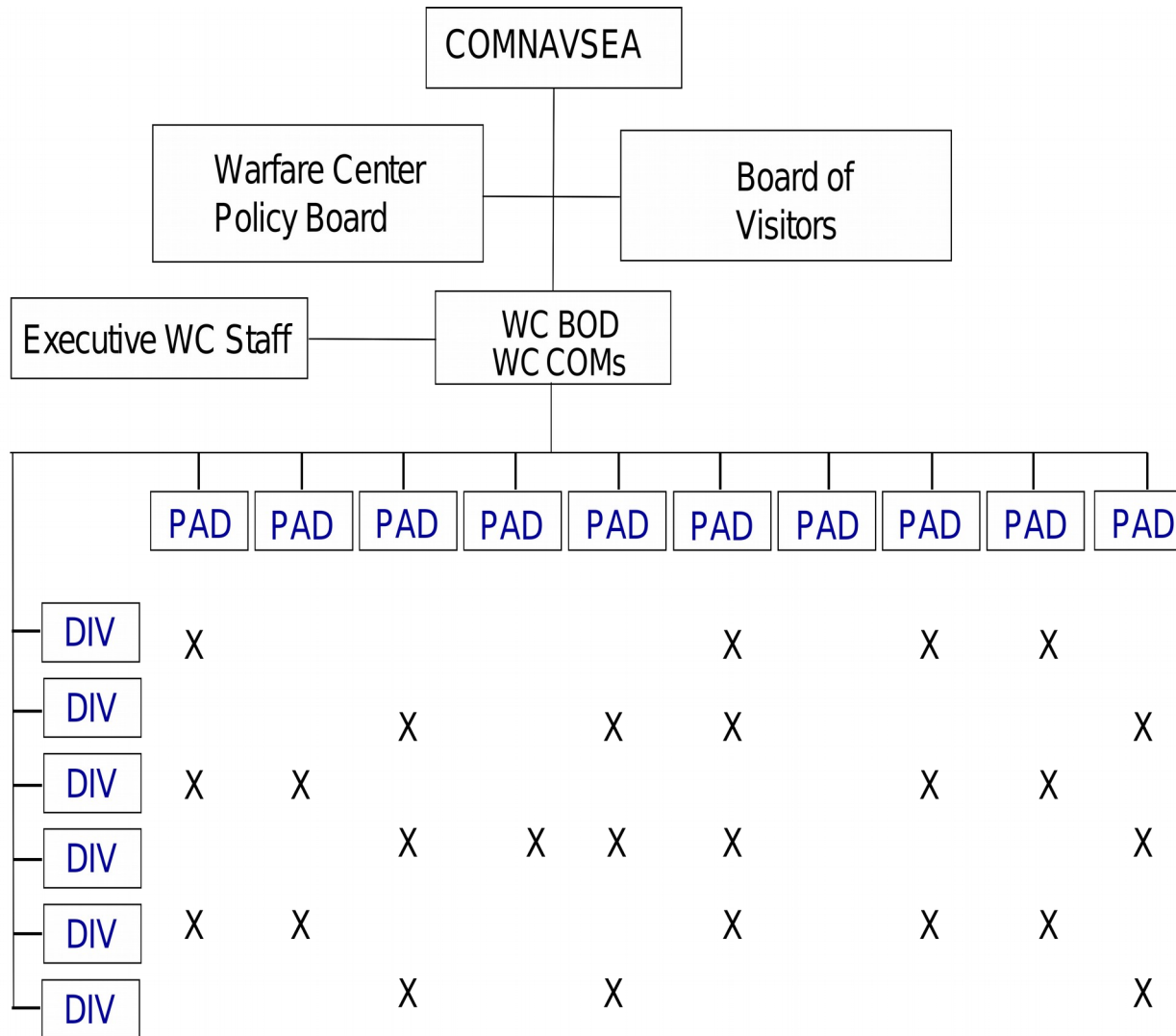
PADs = SES

Integrated Warfare Center



WARFARE CENTERS' ALIGNMENT

Creates New Relationships





THE PRODUCT AREA DIRECTORS (PADS)

Force Level Warfare Systems

Tom Pendergraft (DL)

Ships and Ship Systems

Randy Reeves (CD)

Surface Ship Combat Systems

Charlie Giacchi (PHD)

Littoral Warfare Systems

Dave Skinner (DD/CSS)

Navy Strategic Weapons Systems

Shelia Young (DL)

Ordnance

Steve Mitchell (IHD)

Undersea Warfare Command and Control Systems

Don McCormack (NUWC)

Undersea Warfare Weapon and Vehicle Systems

Pete Trask (NUWC)

Undersea Warfare Analysis and Integration

Don McCormack (acting) (NUWC)

USW Fleet Material Readiness

Jim Meng (NUWC/KPT)

Homeland and Force Protection

Gene Gallaher (DL)

Surface Warfare Logistics and Maintenance

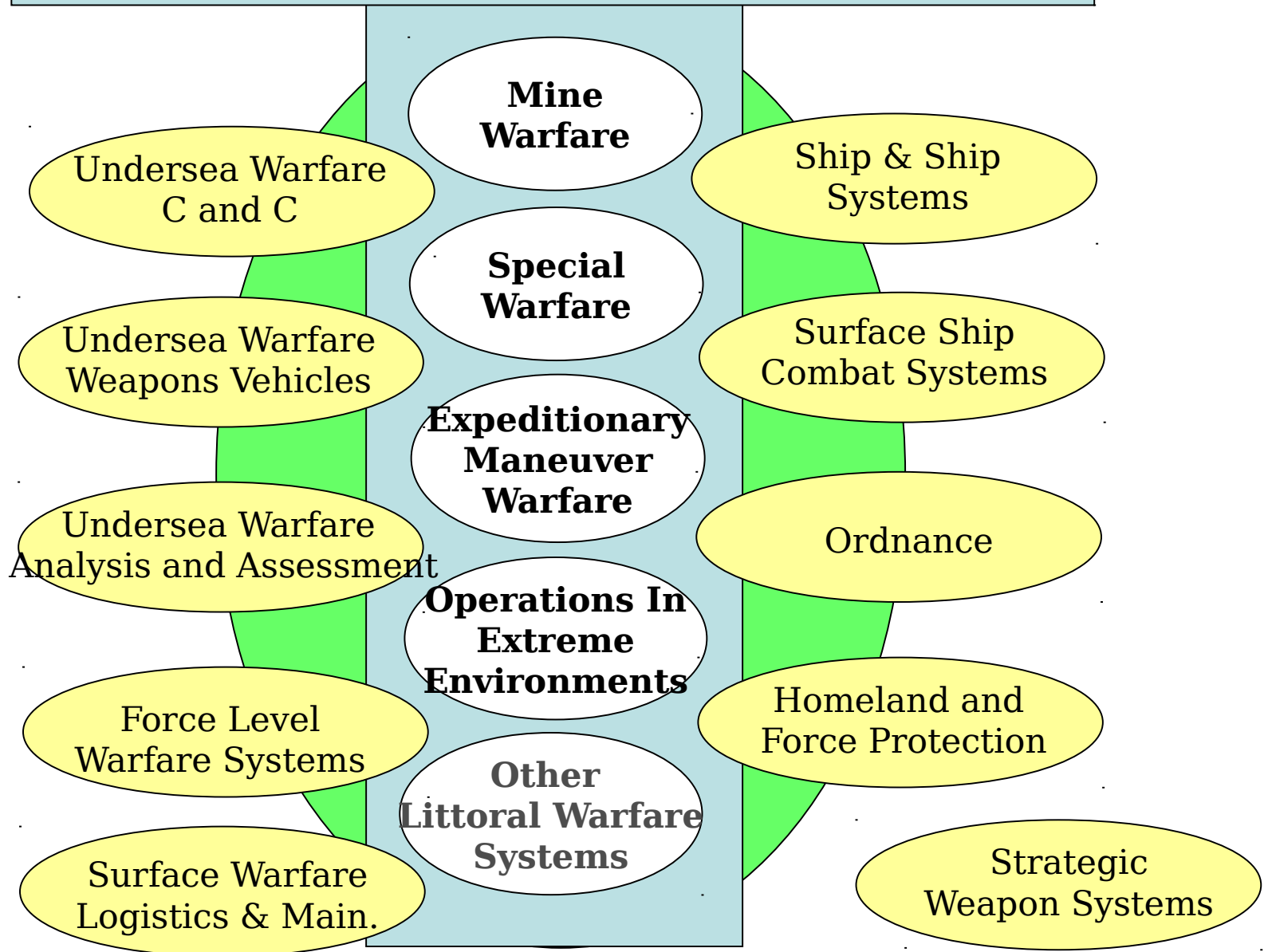
Duane Embree (CD)

PAD OPERATING PHILOSOPHY

- The job of the PAD is to set the strategic course for Littoral Warfare through:
 - Communication
 - Collaboration
 - Shared Vision

In alignment with the Navy & MarCor future

The Littoral Warfare PA Components



Littoral Warfare Product Area and Sea Power 21

Sea Shield

Sea Trial

Sea Warrior

Sea Enterprise

FORCEnet

Sea Strike

Sea Basing

- LCS
- Mine Countermeasures
- Unmanned Systems
- Coastal & Maritime Security
- ISR
- Diving & Life Support

- DJC2
- Maritime Special Warfare
- Expeditionary Maneuver Warfare
- Organic Mine Countermeasures
- Unmanned Systems
- Deployable Joint C&C (DJC2)
- ISR
- Mines
- Combatant Craft

- Strategic Sealift
- Maritime Pre-positioned Fleet
- Mine Countermeasures
- Force Protection
- Logistic Systems

June 2000

Boundary representation is not necessarily authoritative.

802703AI (R00352) 6-00

Scale 1:134,000,000
Robinson Projection
standard parallels 38°N and 38°S

SEA SHIELD

Future Technologies

- ✓ Organic mine countermeasures
- ✓ Multi-sensor cargo inspection equipment
- ✓ Advanced hull forms & modular mission payloads
- Directed energy weapons
- ✓ Autonomous unmanned vehicles
- ✓ Common Undersea Picture
- Single Integrated Air Picture
- Distributed Weapons Coordination



Sea Shield

Speed will be an ally as linked sensors, high-speed platforms, and improved kill vehicles consolidate area control, including the location and neutralization of mines via state-of-the-art technology on dedicated mine warfare platforms and battle group combatants. **Sea Power 21 Projecting Decisive Joint Capabilities, By Admiral Vern Clark, U.S. Navy, Naval Institute Proceedings, October 2002**

SEA STRIKE

Future Technologies

- ✓ Autonomous, organic, long-dwell sensors
- ✓ Integrated national, theater, and force sensors
- ✓ Knowledge-enhancement systems
- ✓ Unmanned combat vehicles
 - Hypersonic missiles
 - Electro-magnetic rail guns
- ✓ Hyper-spectral imaging



Sea Strike

Sea Strike capabilities will provide Joint Force Commanders with a potent mix of weapons, ranging from long-range precision strike, to covert land-attack in anti-access environments, to the swift insertion of ground forces. Information superiority will empower us to dominate timelines, foreclose adversary options, and deny enemy sanctuary. Sea Strike operations will be fully integrated into joint campaigns, adding the unique independence, responsiveness, and on-scene endurance of naval forces to joint strike efforts. **Sea Power 21 Projecting Decisive Joint Capabilities**, By Admiral Vern Clark, U.S. Navy, Naval Institute *Proceedings*, October 2002

SEA BASING

Future Technologies

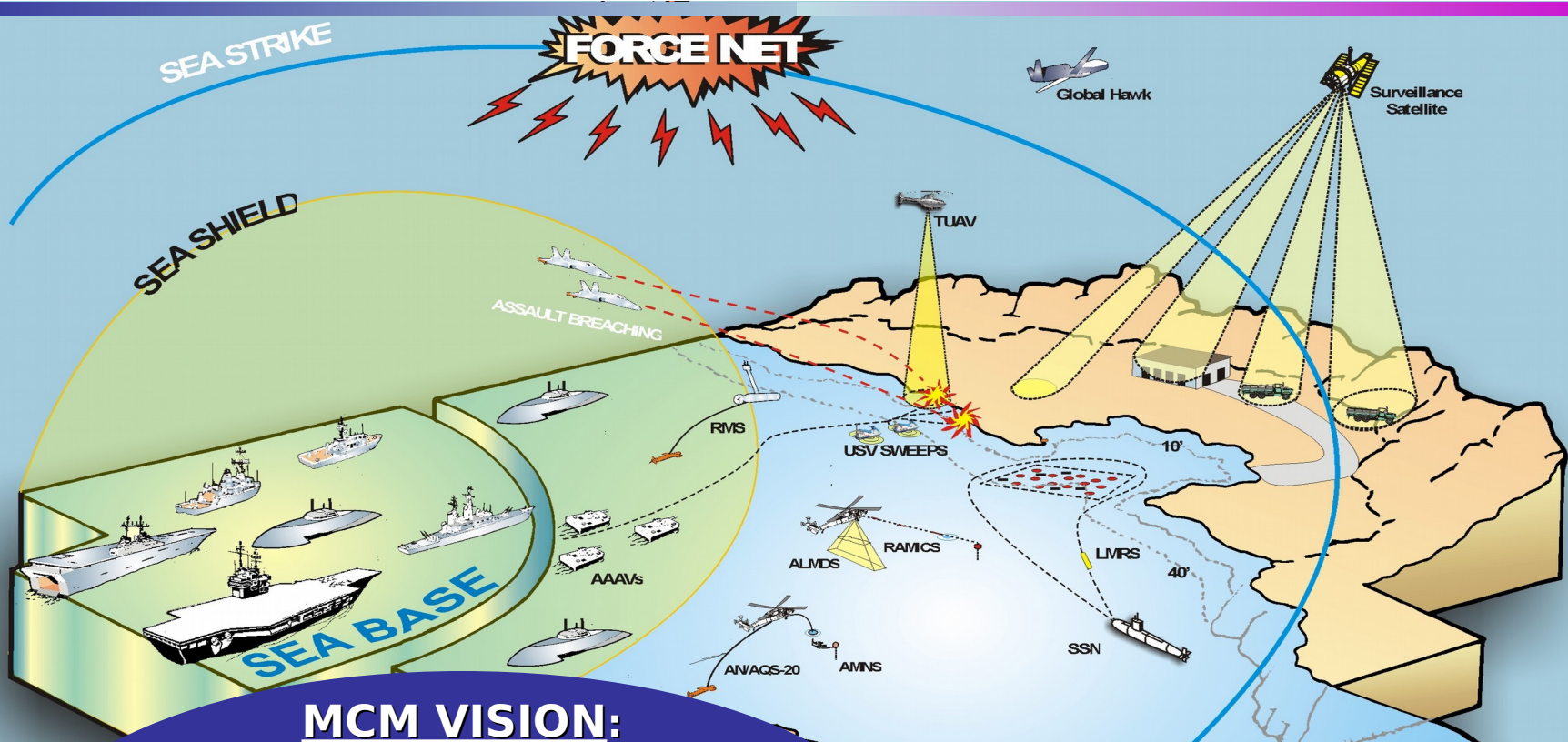
- ✓ Enhanced sea-based joint command and control
- ✓ Heavy-equipment transfer capabilities
- ✓ Intra-theater high-speed sealift
- Improved vertical delivery methods
- ✓ Integrated joint logistics
- Rotational crewing infrastructure
- ✓ International data-sharing networks



Sea Basing

Sea Basing is the core of "Sea Power 21." It is about placing at sea—to a greater extent than ever before—capabilities critical to joint and coalition operational success: offensive and defensive firepower, maneuver forces, command and control, and logistics. By doing so, it minimizes the need to build up forces and supplies ashore, reduces their vulnerability, and enhances operational mobility. It leverages advanced sensor and communications systems, precision ordnance, and weapons reach while prepositioning joint capabilities where they are immediately employable and most decisive. By **Vice Admiral Charles W. Moore Jr., U.S. Navy, and Lieutenant General Edward Hanlon Jr., U.S. Marine Corps**, Naval Institute *Proceedings*, January 2003

MCM Vision



MCM VISION:

Field a Common Set of Unmanned, Modular MCM Systems Employable from a Variety of Host Platforms or Shore Sites that can Quickly Counter the Spectrum of Mines to Enable Assured Access with Minimum Risk from Mines

GOALS:

- **Speed the MCM timeline**
- **Remove the man from the mine field**